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Communicating With Users of the Angeles National Forest: Report No. 2

A Technical Research Report

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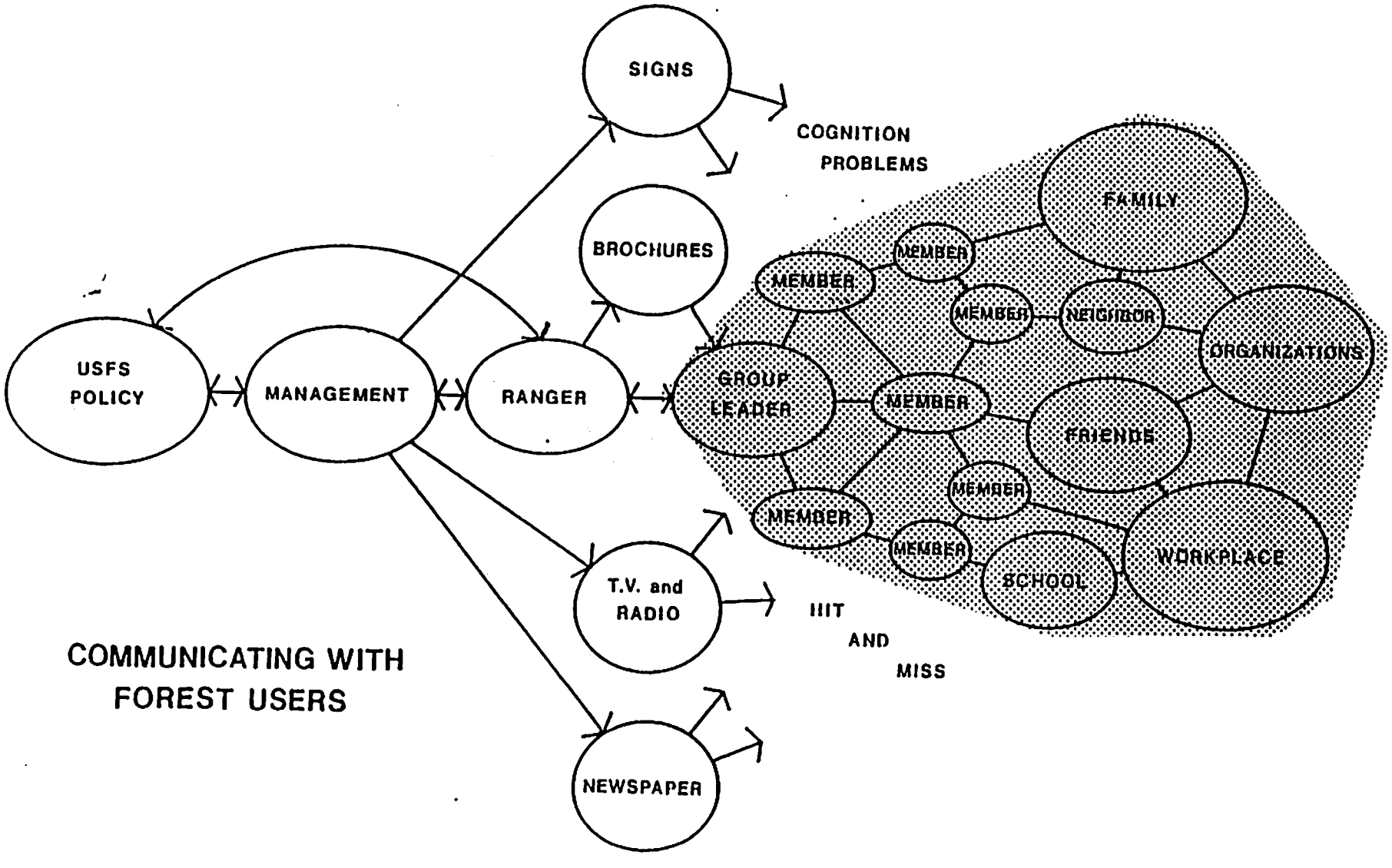

COMMUNICATING WITH
FOREST USERS

FOREST VISITOR COMMUNICATION PROFILES: RECREATION RESOURCE USERS OF THE WILDLAND-URBAN INTERFACE

INTRODUCTION:

California State University (Chico and Pomona) conducted several studies of outdoor recreation resource users of the San Gabriel Canyon on the Angeles National Forest, Southern California, between 1987 and 1990. These studies, supported in part by the U.S. Forest Service, Pacific Southwest Experiment Station, were intended to provide an understanding of the communication behavior of the "new forest user" so that the Forest Service can build effective information, education, and marketing programs. "New forest users" in this case are urban-based, multi-ethnic visitor groups largely from the Los Angeles basin communities and are perceived to vary from the traditional forest visitor and to require different marketing and management practices (Hartley, 1986).

The body of this report describes the results of two surveys with random samples of persons who used the San Gabriel Canyon for outdoor recreation during the summer and fall of 1988. The findings are related to well-established communication and social marketing principles where appropriate. The intended audience is the Forest Service recreation planner and manager, public affairs officer, fire prevention officer, and others in positions involving public contact as a significant part of their work.

Although specific recommendations are made occasionally as illustrations of possibilities, translation of these findings into plans and management practices requires greater knowledge of the goals, possibilities, and limitations of the Forest Service than anyone outside the Forest Service can have. Therefore, recommendations should be taken as examples, with agency planners and managers accomplishing the last phase of the work by incorporating these findings into operations in appropriate ways.

THE PROBLEM:

Marilyn Hartley's 1986 report, titled "An Analysis of Recreation Management on Southern California National Forests," was based on a survey of employees of Southern California National Forests, contacts with forest users, and a review of selected forest management literature. She summarizes the problem thus:

> With 15 million residents in Southern California, recreation managers face the challenge of finding ways to maintain traditional Forest Service values and keep public recreation appropriate to the forest environment while still being flexible enough to respond to the changing recreation needs of the urban population (p. 3).

Hartley identified and recommended "stay close to the customer," as one In Search of Excellence principle. That problem is made more difficult on Southern California forests by cultural influences unusual to the Forest Service. Among these are:

1. Snort distances from urban populations lead to very high day use.
2. Etnnic diversity, especially a strong Hispanic influence.
3. Differing social and recreational values.
4. Inexperienced users with an urban orientation (p. 8).

One of Harley's nine recommendations was to develop an outreach program to improve communication with urban populations. This study is designed to discover the most effective way to do so.

Section 2

COMMUNICATION

"Communication is defined as a process in which the participants create and share information with one another in order to reach mutual understanding" (Rogers and Kincaid, 1981, p. 63).

Those of us who do natural resource management communication in areas such as fire prevention, safety, enforcement, and even environmental education may find this definition unusual. We are more used to thinking of communications in terms of getting a job done. We have specific objectives. There are certain things we would like forest visitors to do and other things we want them not to do. We are looking for usable, effective messages and media.

Those of us in marketing or land-use planning will find the definition more appropriate. The processes of public input serve a different objective. In most cases, the goal is to learn how the agency's publics think and feel about natural resource management issues and practices. We want to listen to them, create plans and products, evaluate these plans and products with the public, make revisions, implement the plans, evaluate, revise, and so on, in a constant process of creating and sharing information toward a dynamic understanding and agreement about how natural resources should be used and managed.

Earlier definitions of communication usually reflected the first--a variation of the S-M-C-R model, in which a source (we) makes a message, sends it through some channel (newspaper, sign, campfire talk, etc.) to a receiver (forest visitor), then observes the effects. "In the main, communication has as its central interest those behavioral situations in which a source transmits a message to a receiver(s) with conscious intent to affect the latter's behavior" (Miller, 1966).

From education and the management by objective tradition, we adopted the idea of measurable behavioral objectives. Many of us learned to write performance objectives that described in measurable terms just how we wanted the receiver to think, feel, or behave as a result of our advertisements, interpretation and environmental education messages, signs, and public presentations (Mager, 1984; Hodgson, 1984).

These ideas result from looking at the process from the source's viewpoint. That is how communication does look from the front of a classroom, lecture hall podium, the desk in an advertising firm, and the front seat of a patrol car or fire prevention technician's pickup. Fazio and Gilbert (1986) defined public relations (part of natural resource communication) as, ". . . the favorable influencing of public opinion" (p. 35). These are accurate and useful perspectives on communication, but they are woefully incomplete. These are like describing a house as seen from the street. If you go around back, walk through the house, or see it from the air, it will be described quite differently.

Even while the S-M-C-R and persuasion models were dominant among researchers and practitioners alike, some people began looking at the audiences from the inside. Observers began asking not only how mass media influence people, but also how and why people use mass media (Palmgreen, et al, 1985, p. 11). Innovation diffusion research (the theory on which agricultural extension, for example, is based) focused more on those who adopted or rejected new ideas than on those who promoted them, to explain how new ideas and technologies spread through social systems (Rogers, 1983, pp. 91-100), and how information was acquired and used in social networks (Rogers and Kincaid, 1981).

Marketing was also redefined from "selling" to a customer-centered approach with marketeers seeking to discover the wants and needs of different market segments, produce, and, finally to price, deliver and support the appropriate products and services. Promotion, in marketing, thus has evolved from selling to informing. Similar changes have taken place in the social marketing sectors (Solomon, 1989, pp. 87-104).

Today, communication is approached from several perspectives different from that of persuasion, which, although recognized as one legitimate function of communication, has been bypassed as more attention in both theory and practice is placed on understanding how people acquire and use information for a variety of purposes. We have pretty much given up the search for that magic combination of source, message, and channel which will cause receivers to see things our way and do what we want them to do (Grunig, 1989, p. 199). We recognize that the ones we used to call "receivers" are also active information seekers and users with their own purposes (Palmgreen, et al, 1985, p. 23 and 25). The receivers (the forest visitors) are therefore much more in control of the communication process than is the source (the Forest Service).

The meaning any message has for an individual forest visitor and its effect on his or her thoughts, feelings, and behaviors ultimately depends on how the receiver "makes sense" of it and the social, physical, emotional, and cognitive environments within which the message is "processed." "The sense people make of the media messages is never limited to what sources intended and is always enriched by the realities people bring to bear" (Dervin, 1989, p. 72). Some of those realities are the opinions, interpretations, wants, needs, and predispositions of others with whom they associate.

The research reported here proceeded from the assumption that communication with forest visitors is <u>not</u> intended as persuasion, but as a dialogue in which both users and agency might be open to change. ". . . Communication effectiveness means minimizing misunderstanding" (Gudykunst and Kim, 1984, p. 191). The ways that visitors find and use information was accepted as a given, not as something that can be changed much. The strategy was to learn the natural information gathering and processing patterns of forest visitors and to find places, times, people, and channels where the forest visitor and the Forest Service can link. The idea is not to design powerful messages and presentation methods to mold the visitor to the Forest Service's images of correct behavior (an impossible task, anyway), but rather to find and adapt to natural communication patterns through which ideas can be created and exchanged and mutual understanding achieved.

Communication between Forest Service employees and visitors to the National Forests near large urban areas will almost always be intercultural. Culture is made up of the beliefs, values and accepted behaviors that are shared and seldom questioned. Culture does not mean national origin or race. A land ethic--ideas about what is right and wrong in the way we use and treat land--is part of culture. So are ideas about the proper roles of government officials and citizens, proper economic relationships, work and leisure ethics, family and kinsnip patterns, and even what is proof of "truth." The pnilosophy of science and deductive logic, for instance, are not universally accepted as valid even in the United States.

The Forest Service is a culture whose employees share unquestioned beliefs, values and performances more with each otner tnan they do with the general population. Forest Service culture is probably largely received from Northern Europe's 19th Century land ethics, modified by pioneer experiences on the vast North American wildlands, especially the West. Whatever Forest Service culture is, it is different in many important ways from that of the United States as a whole. When compared to the many cultures represented by visitors to tne wildland-urban interface, the differences are even more remarkable. All communication between the Forest Service and the public can be assumed to be intercultural communication.

Trainers in marketing, persuasion, and a variety of other applied communication fields have long encouraged their students to avoid the "shotgun" approach in which one message is intended for all groups, but to use instead a "rifle" approach in which the message is targeted specifically at some small segment of tne audience. We prefer what might be called a "fly fisning" model of communication to either tne "snotgun" or "rifle" models.

A successful angler using artificial flies must "matcn tne natcn" and present tne lure in a natural way so that it closely imitates the fisn's natural food as tne fish expects to encounter it. A successful angler learns fisn benavior and stream entomology, and carefully prepares or selects flies for the particular fisn, water conditions, and feeding benavior.

Anglers fish when it is convenient for the fish, not when it is convenient to tne angler. Those who catcn fish on artificial flies learn tne natural feeding patterns of tne fisn, then deliver the appropriate lure where, when, and in tne precise way that the fish is accustomed to feeding. Successful communication with any public will imitate tnis model. The communicator will prepare messages of tne kind tne receiver looks for, and will deliver them where, when, and now they would be expected.

Tne "fly fishing" model is a more useful picture of resource management communication than eitner tne "snotgun" or "rifle" models. It has an unfortunate connotation, however. When the angler catches the fish, the effect is one-way; in communication, it is two-way. In tne best events, all parties are influenced, benefit from the new understandings, and accommodate each otner.

The theories that directed our thinking as we prepared, conducted, and analyzed these surveys of San Gabriel Canyon usage are the convergence theory and uncertainty reduction theory. For readers wishing to look up sources, convergence theory is explained well in Communication Networks (Rogers and Kincaid, 1981), and "Convergence Theory and Intercultural Communication" (Kincaid, 1988). Uncertainty reduction theory is explained in "Uncertainty and Anxiety" (Gudykunst, 1988).

In conclusion, our reason for including this theoretical discussion has been to establish the point of view from which we approached the problem of efficient communication with forest users. We take the position that success here means minimized misunderstanding and changes by both parties; we specifically do not define its effectiveness as maximum compliance by the receiver with the wishes of the source.

We seek in the natural communication behaviors of the forest visitor an opportunity--an open window of time, place, and situation through which we can exchange and create information with each other.

We recognize that forest visitors, particularly those using the outdoor recreation resources of the wildland-urban interface, are a diverse group and that representatives of the Forest Service who meet them will almost always find themselves in an intercultural communication situation.

Mutual understanding will not be simple. Our ordinary experience and training do not prepare us for it and, in fact, often provide us with assumptions and patterns that make intercultural communication difficult. However, our success is essential to effective resource management, especially where many publics claim a stake in the public natural resources. Managers should expect to create and make substantial investments in novel strategies for the unique settings and problems of the wildland-urban recreation interface.

Section 3

HOW DATA WERE COLLECTED AND ANALYZED

Data Collection

The primary location of data collection was the San Gabriel Canyon on the Angeles National Forest in Southern California. This area was selected because it offered a culturally diverse mix of uses and user groups, and appeared typical of many outdoor recreation resources on near-urban national forests.

Two on-site survey-interview procedures were implemented during the summer and fall of 1988. One examined the communication patterns and preferences of individual randomly-selected users. The second studied pairs of leaders and followers sampled at random from recreation groups.

A sampling procedure identified eight interview sites on the forest, ranging from developed day-use areas and campgrounds to dispersed recreation sites along the forks of the San Gabriel River. The river sites ranged in size from 1/8 to 1/2 mile of river corridor, and were randomly selected both geograpnically and by time. All groups present during the sampling period were contacted.

Analysis

Culture and ethnicity. There was reason to believe that the use of mass media and interpersonal communication channels would be different among the several cultural and ethnic groups using the recreation resources of the San Gabriel Canyon. Just as individual identity within a milieu is associated with differences in other behavior, it might be associated with differences in communicative behavior. Therefore, respondents were asked, "What ethnic or cultural group do you prefer that people think of you as?" The questions were open ended; no categories were provided to choose from. Interviewers wrote down exactly what they were told. Later, when data were coded, some categories were combined to provide sufficient numbers in each category for statistical analyses. However, this practice was kept to a minimum.

All those who reported a Latin American cultural identity were classified as "Latin." Those who said Asian or Vietnamese were as "Asian." The "European" category was made up of Dutch, Scandinavian, Irish, and Polish. Other categories represent responses given without aggregation.

Interviewers did not ask the nation of origin or other background information to classify individuals because it is the cultural or ethnic identity the respondent feels, rather than any objective measure of race or national origin, that should predict behavior. Had we provided categories, it is not likely that such a large proportion of "Americans" would have appeared. And yet, those who said they are "Americans" seem to have some different communication behavior than those who reported other identities.

The data were analyzed for all respondents combined, then differences among ethnic identifies were looked for.

Leadership and Influence. Other research with forest visitors has demonstrated that group leaders and those who report greater influence on the group's choice of recreation site and activities have different communication behaviors than do followers and less influential members (Hodgson, 1981; Weber, 1989; Hill, 1989; Runner, 1989). Recreation is a group activity; its nature influences behavior on any given resource (Cheek, et al, 1978). One's role in the group probably influences one's communicative behavior. Those with greater influence on the opinions and behaviors of others in groups have been shown to behave differently than those with less opinion leadership (Rogers, 1983, pp. 271-307). For example, opinion leaders are known to use more mass media than do followers. They pay attention to more media of regional and national scope and take an interest in events outside their own communities. They are more socially active. They deal with abstract ideas better. They plan more. They are earlier to adopt new ideas that are relevant to them.

Group leadership was determined by asking, "Who do you consider the group leader?" Influence was measured by asking, "How would you describe your role in the decision to come here today? ( ) Solely responsible, ( ) shared responsibility, ( ) made a suggestion, ( ) no involvement."

During analysis, differences between leaders and other group members as well as between more and less influential individuals were sought. Presumably leaders and more influential members influence the group's behavior more than average participants do. If so, it would be particularly helpful to know about communicative behavior of these people.

Statistical Analysis

Inferential statistics are used to test the significance of relationships observed in random samples. To say there is a significant relationship between, say, ethnic identity and when the respondent first visited San Gabriel Canyon is to say that the relationship is probably real and will be found in the population as well as in the sample.

Samples virtually never look exactly like the populations they are taken from. In random sampling, the probabilities of different sizes of sampling error are known; thus one can estimate the chances that the relationship seen is not real, but occurred instead as a result of chance. In this report, those relationships that would be seen five or fewer times in 100 samples when they did not actually exist in the population will be considered real and called "significant." Those that would be seen less than 15 times in 100 will be discussed, but the reader should know that there is a good chance they are not real. Those that would occur 15 times in 100 or more often will be considered not real--the result of random sampling error only.

It is essential to note that statistical significance means simply that the observed relationship is probably real. A "significant" relationship is not necessarily important for management purposes.

Common statistical tests were used. The Chi Square test is used for relationships among categorical data such as ethnicity and sex. The Kruskal-Wallis test is an analysis of variance test that evaluates relationships between variables measured in categories and other variables measured by rank ordering. These and other statistics used are described in most introductory statistical texts.

Using the Results Elsewhere

The logic of probability, strictly interpreted, only allows one to apply the observed results to that population actually in the area during the period of sampling. In the strictest sense, the conclusions could not even apply to users of the San Gabriel Canyon during the following summer. However, such a strict interpretation would make the use of survey data for management useless. It would, in fact, make useless the application of all experience to any future situations. Some criteria other than statistical generalization must always be used when research is applied to management problems.

The rule is: As there are differences, the findings can still be used but with increasing caution. For example, one might not want to make large investments based on one study done of a user population from a much different locality without first doing some careful checking to see if the same relationships hold. If numerous studies with many different populations produce similar data, however, one would feel safer making the investments.

Conclusions from this study can be applied to other populations of wildland-urban interface recreation resource users with some confidence if the manager finds a similar population since they agree largely with findings in marketing and other studies of outdoor recreation communication. Caution is, of course, recommended; serious effort should be made to compare the populations before originating or changing a course of action.

Section 4

INTERPERSONAL COMMUNICATION

Users of San Gabriel Canyon outdoor recreation resources will be reached most effectively through interpersonal communication, a task considerably more complicated than simple one-on-one contact between visitors and Forest Service personnel. This is made clear by findings described earlier:

* Although more than 70% of those surveyed first heard of San Gabriel Canyon through interpersonal channels, less than 1% learned from an official source. (See Table 1.)

* The typical visitor will use the area only a few times per year.

* More than a third of those interviewed were first-time users during the year of the survey; more than a quarter were first-time visitors on the day they were questioned.

Interpersonal communication is more than a face-to-face exchange between individuals. People are part of social networks in which information is traded, created, and evaluated. When Forest Service employees talk with forest visitors, the exchange is really between the employees' networks and the visitors' networks. The employees' decisions and actions and what they ask of visitors are governed by their understandings about official and unofficial Forest Service expectations of their behavior. They would seldom think of negotiating compliance with rules, regulations, or even behaviors that could be called "manners" while on duty as Forest Service representatives.

Visitors are in a similar position although they depend on their networks less formally than employees do. Groups use outdoor recreation resources; individuals seldom do. Even those people who do come to the forest alone have been influenced by whoever has contributed to their recreation decisions, those they came to the site with or met there and those at home from whom they heard about the Canyon.

Groups visiting forests and parks are not simple collections of people. They have structure. Members divide up what tasks must be done including the acquisition of knowledge, its intra-group spread, interpretation, and use.

Group structure allows for efficient information processing. Not all members must discover everything directly form the environment. What some individuals learn will be shared. However, not all information is valid. A percentage of messages are intended to mislead or even cheat the receiver such as some advertising. User groups may actually view official communication as just more and different commercials. How can the group most discriminately pool, process, and evaluate such messages? What, after all, is the difference in the visitors' eyes between a Forest Service Ranger and the concessionnaire's campground "ranger?"

Outdoor recreation is composed of five stages with the importance and duration of each one apparently varying from time to time with the type of experience and, perhaps, the ethnic or cultural groups involved. However, each one seems to consist of anticipation, travel-to, onsite experience, travel-home, and recollection.

Groups apparently seek information about resources during the anticipation stage and relate their experiences during the recollection phase (Hodgson, 1981). Those who consider going to the San Gabriel Canyon are active information seekers. Those who have been there are active relaters, providing a natural information cycle between the resource and user populations. The Forest Service should attempt to use this cycle for communication with visitors.

The generalized anticipation stage will probably not be destination specific at first, with the potential visitor simply open to hearing where one can go to have a good time playing outdoors. Planning may need very little time or attention as the individual recalls the descriptions by family or friends who had previously used the site.

The most vital information flow between the Forest Service and San Gabriel Canyon users may well result when past visitors describe their recent outings to others who will remember when their own recreation opportunity arises. If the Forest Service enters this communication cycle during the on-site experience, what information employees provide will not only influence visitors the employees actually talk to but also those to whom the users describe their outings.

This portion of the report analyzes San Gabriel Canyon visitors' communication patterns by ethnic identity, leadership roles, and the degree of influence reported regarding the group's recreation decision.

Telling Others About One's Experiences

Interviewees were asked, "After your last forest recreation outing, did you talk to anybody about what you did or where you went?" People were asked, "Who did you talk to?" and "Where were you when you talked with that person?"

More than 60% of the respondents said that they talked to someone about their experiences. Approximately 22% talked with family, 65% with friends, and roughly 13% with co-workers. The event was discussed at home by 27% with around 20% doing so at work. (See Table 4.)

The potential of social networks as communication channels is clearly demonstrated by the fact that nearly two out of three forest visitors reported talking to someone else later about their outings. This represents an important, credible way to multiply Forest Service message impacts. We don't know how many people the visitor discussed the experience with. It may have been several, some of whom possibly passed on the information. In this way, the ripple from one on-site contact might reach a sizable audience.

Table 4

Percentage of Respondents Who Talked to Someone About Their Last Forest Recreation Outing and Where They Talked

Respondents' Preferred Ethnic Identity	Percent Who Talked Anywhere*	Percent Who Talked At Home*	Percent Who Talked At Work*
Total Sample	61.4(n=220)	27.0 (n=209)	20.5(n=209)
Black (n=7)	85.7	42.9	28.6
European (n=11)	72.7	45.5	36.4
Asian (n=12)	66.7	41.7	8.3
White (n=50)	61.2	29.5	25.0
American (n=29)	57.1	19.2	23.1
Latin (n=42)	50.0	34.1	12.2

* Percentages reported for each ethnic identity are computed by dividing the number of each ethnic identity who said they talked by the number who reported that ethnic identity. For example, six of the seven who said they were Black also said that they talked about their last outing. The numbers do not sum to the numbers reported for the total sample because many of those surveyed did not report their ethnic identity.

Ethnic identity may influence whether or not one talks about one's forest recreation. ($p < .08$). Those calling themselves Latins may be more likely than "Americans" to report telling others about their last outing. Otherwise, no differences were observed. Everyone talked mostly with friends, except those claiming European ethnicities, who talked about equally with friends, family, and co-workers.

Males and females were equally likely to discuss recent outings. Older and younger respondents talked to others in about equal proportions. Age made no difference as to where one discussed the experience, although older people were more apt to tell co-workers about the outing ($P < .01$).

More experienced users are an important link between the Forest Service and the users' networks. Greater opportunity exists for contact with those who visit the Canyon more often.

Those who reported talking about their last forest recreation outing had been using the Canyon longer than those who did not talk about it ($p < .001$).

However, those talking with co-workers had the fewest years of experience; people discussing the event with friends had intermediate numbers of years since they first visited the Canyon; and individuals who talked to family members had the longest history of use ($p < .019$). No statistically significant differences were found between those who had talked about their last outing and those who had not regarding the number of days per year they expected to use the Canyon. Since more experienced visitors are likelier to talk to others, the opening to interpersonal communication networks is especially good through them.

Group leaders were no likelier to talk about an outing than others. Respondents were asked, "How would you describe your role in the decision to come here today?" Those claiming they influenced the decision were no more likely to have discussed their last forest recreation outing than were those with less influence. Visitors thus appear to talk equally regardless of their degree of leadership and influence.

Talking to Others and Mass Media Exposure

With the exception of guidebooks, mass media are a relatively unimportant way for anyone to learn of San Gabriel Canyon, but the media could play a greater role in integrated strategies. In other studies of how people learn about new things, it has been found that some are first made aware of the idea through the media and then pass the knowledge on through their networks of friends and family. This has been called the "two step" or "multi-step" model for the flow of information from the media to the public. (Rogers, 1983, 272-274) This study was not designed to trace the flow of information from the mass media. However, other studies of recreation groups do support the idea that some members acquire more outside information than others which they share with the group. (Weboer 1989, Hill 1989, Runner 1989) Because of this potential, it is useful to know what mass media those who talk to others about their outings attend to.

Mass media use was measured by asking, "Since last Monday, have you watched any television?" If the answer was "yes," the next question was, "What times of day?" Similar questions counted radio, newspaper, and magazine exposure. Scores were computed by totalling the "yes" responses. A score of "4" means the respondent had read a newspaper, watched television, and listened to the radio since Monday and also subscribes to a magazine.

People who had talked about their last forest recreation outing used more and different mass media than those who had not ($p < .003$). This suggests that information can be introduced into the informal communication networks through the mass media under some circumstances.

Table 5

Media Use by Those Who Talked About Their Last Outing

Respondent Talked About Last Outing	Percent Responding by Media Type			
	Television	Radio	Newspaper	Magazine Subscription
Yes	62.6	61.9	64.8	69.8
No	37.4	38.1	35.2	30.2
Total percent	100.0	100.0	100.0	100.0

Exposure to radio and television and the amount of time spent was not significantly different between those who did and did not talk about their last outing. Those who talked may be more likely to read a newspaper, however ($p < .09$). When a difference is significant at p less than .09 there are less than nine chances in 100 that differences between those who said "yes" and those who said "no" would be this large in a random sample of this size when there actually was no difference in the population. Nine times in one hundred is rare so it would not be a good idea to conclude that those who read a newspaper and those who do not are equally likely to talk about their last outing. The relationship between newspaper readership and talking about outings is uncertain.

There is little doubt, however, that people who talked about their last outing are more likely to subscribe to magazines ($p < .008$). Differences this large would be seen when they did not actually exist in the population only eight times in one thousand random samples of this size.

In summary, visitors at the San Gabriel Canyon were likely to tell others about their experiences, usually friends and family at home or work. Men and women and older and younger forest users almost equally discussed their last outing but frequent Canyon visitors were more apt to relate the episode. Users were no likelier to talk about the outing if they were group leaders or had greater influence on the group's recreation decision.

Those who described their outings use mass media more than those who don't. The difference appears to be greater use of magazines and, perhaps, newspapers. Mass media are apparently not now an important channel through which to reach the forest visitor. However, newspapers and magazines appear to hold some potential as part of an integreated communication program.

Hearing About Others' Recreation

When asked, "Has anyone told you recently about a forest recreation outing they went on?" more than a third (37.1%) said yes; 14.5% were told by family members; 41% by friends; and 18.1% by someone else with the remainder not identifying a particular source. Home was the most common location for hearing outing reports (33.7%) followed by the work place (27.7%).

Table 6

Percentage of Respondents Who Were Told About a Recent Outing

	Respondent's Preferred Ethnic Identity					
Respondent Was or Was Not Told About an Outing	White (50)	Black (7)	Latin (42)	Asian (12)	European (11)	American (29)
Yes	46.0	42.9	26.2	66.7	9.1	44.8
No	54.0	57.1	73.8	33.3	90.9	55.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0

* Numbers in parentheses are the number of respondents reporting that ethnic identity.

Statistically significant differences appear among various ethnic identities. Latin Americans and Europeans were less likely to have been told about someone's recent outing; Asians were more apt to have been told.

Women may hear more than men do ($p < .059$). Latin or White women are more likely to have been told about someone else's outing. In the total sample, 65% of the women and 29.2% of the men reported hearing about another's forest recreation experiences.

Since sex may influence this information flow, at least among Latins and Whites, it is useful to know whether men and women equally determine group recreation choices. Only among "Americans" was such a difference observed. "American" women had less influence on group recreation choices than "American" men did ($p < .03$). Among "Americans" men and women were equally likely to have heard about someone else's outing, however.

The results suggest that although both men and women tell about their experiences equally, the people they tell are more likely to be women.

Age did not significantly affect how often people heard about someone else's outing but experience did. Half of the first time visitors were recently told about someone else's Canyon visit while only about a third of who nad used the area before had heard about someone else's recent experience ($p < .02$).

This finding, combined with one indicating that experienced users more often talk about Canyon recreation helps to clarify the cycle of information from present users to future visitors. If the Forest Service provides visitors with information while they are on-site, they will pass it on to others who will visit later. The informal, interpersonal channels seem to reach the relevant audiences.

People who were recently told about a forest recreation outing were also likely to say that they had less influence on their group's recreation choices ($p < .03$). However, both self-defined leaders and non-leaders were about equally likely to have heard of an outing.

Summary

Information appears to flow through interpersonal communication networks from recreation site users to others who may use the site in the future. That people who experience the Canyon are likely to talk about it appears true for all ethnic identities, ages, and both sexes. The more people use the Canyon, the more they tend to tell others about it while novice users are more likely to be told about outings. Those who talked about their recreation used more mass media than those who did not. Latins and Europeans were less likely to have heard such accounts while Asians were more often told. Women may have heard about other's experiences more often than men. People who influence group decisions and more experienced Canyon users were less likely to have heard recently of someone else's outing but users of all ages were apt to have been told.

Section 5

CANYON VISITORS' EXPOSURE TO MASS MEDIA

With the exception of guide books, mass media proved unimportant as information channels about the Canyon. Either there is little in the media about recreation opportunities on the Forest or users prefer not to use mass media. Whatever the reason, informal, interpersonal channels provide the best link between the Forest Service and Canyon visitors. However, mass media can supplement interpersonal channels and, perhaps, increase the quality of messages passed through them. Canyon visitors' uses of the mass media are described in this section.

Electronic Media

Respondents were asked, "Since last Monday, have you watched any television?" and "have you listened to radio?" Those who answered "yes" were asked, "What times of day?"

Of the sample, 82.6% reported watching television and 87.1% listening to the radio. About half the interviewees (47.9%) watched television "all day." Among those who gave a beginning and ending time, 26.3% began watching television at 5:00pm and 32.8% began at 6:00pm. The most common time to stop viewing was 9:00pm (25.9%) and 10:00pm (24.7%). An even larger number reported listening to the radio "all day" (87.1%) but few began before 6:00am and most ceased before 8:00pm. Among the electronic media, daytime radio and evening television reach the largest audience of potential visitors.

Ethnicity showed no clear relationship with the degree of exposure to the electronic media. Latins, Europeans, and "Americans" may be more likely than Whites, Blacks, and Asians to listen to the radio all day ($p < .09$). At this level of statistical significance, however, one cannot conclude whether or not there is a real difference between the groups.

Older and younger respondents and men and women were equally likely to listen to the radio and watch television.

Less influence on the group's recreation site decision was reported among Whites by those who said that they watched television ($p < .001$) That difference was not seen in other ethnic groups. No influence differences were found between radio listeners and non-listeners.

Print Media: Newspapers

More than three quarters (76.8%) had read a newspaper "since last Monday." The sports section was read by 45.3%; the front page by 42.8%; comics by 22%; the business section by 20.1%; the classified ads by 18.9%; the magazine sections by 13.2% and the editorial page by 15.7%.

All ethnic identities were equally likely to read the newspaper. However, there may be differences in which portions are read ($p < .09$). If the

observed differences are real in the population as a whole, Whites and Europeans read the front page more than do Latins, Asians, and "Americans." At this level of statistical significance one cannot conclude whether there is or is not a difference.

Men and women were equally likely to read a newspaper with almost half the men (49.5%) reading the sports section while only 20% of women did ($p < .005$).

Older and younger people read newspapers about equally but older respondents were more apt to read editorials ($p < .03$).

Print Media: Magazines

Over half the respondents (54.1%) subscribed to a magazine. Latins may be less likely to subscribe than others are ($p < .06$).

Men and women and older and younger people were equally likely to subscribe. No differences were seen between those with more and those with less influence on the group's choice of recreation site, or between group leaders and followers.

Preferred Media

Respondents were asked, "Consider the four communication options: television, radio, newspapers, and magazines; where would you most like to find messages about recreation in San Gabriel Canyon?" Newspapers were preferred by 34.8%, radio by 28.5%, television by 26.8% and magazines by 9.6%. Ethnic identity, sex, age, and group leadership were unrelated to media preference. However, the degree of influence over the group's choice of recreation site made a difference in media preference. Those who preferred newspapers had the greatest influence with influence decreasing among those who preferred magazines, radio, and then television ($p < .008$).

Preferred On-Site Communication

Respondents were asked whether they "liked very much," "liked," or "disliked" five different forms in which the Forest Service could provide on site information. Brochures were the preferred medium, then signs, rangers, bulletin boards, and radio. These preferences were similar irregardless of the other personal variables measured.

Preferred Music

Radio audiences can be segmented by what music they enjoy. The station and specific program selected for communication will therefore depend on what music that station plays and the music liked by the audience the Forest Service wishes to reach. Most preferred rock (43.4%), with jazz and classical second (12.0%), easy listening third (10.8%), country (7.2%), no preference (7.2%) pop (4.8%) and rythm and blues (2.4%).

Table 7

On-Site Media Preferences

Medium	Rank	Percentage of Respondents by Level of Preference for Different Media: Like Very Much	Like	Dislike	Total Number	Percent
Brochure	1	32.7	52.9	14.3	223	99.9
Signs	2	24.7	54.3	21.0	219	100.0
Ranger	3	22.3	54.1	23.6	220	100.0
Bulletin Board	4	19.5	51.6	28.8	215	99.9
Radio	5	24.0	46.5	29.5	217	100.0

Ethnic identity, sex, and one's influence on the group's recreation site choice were not related to music preference but age was ($p < .0001$). Classical music listeners are oldest followed in order by no preference, jazz, easy listening, pop, rythm and blues, and rock.

Summary

Use of both electronic and print media is widespread among surveyed Canyon users. Although television viewing is most common, followed by radio, then newspapers and magazines, newspapers were the preferred medium for receiving recreation information with radio and television next. Few preferred magazines. Newspaper importance is further highlighted by the fact that those preferring them have more group influence than do others.

Television messages will reach the greatest number between 5:00 p.m. and 10:00 p.m. while radio will have its greatest reach between 6:00 a.m. and 3:00 p.m. The largest number of respondents listen to rock stations, although music preference varies by age. Sports (mostly male readers) and the front page are the most read newspaper sections. Over half the interviewees subscribe to magazines with group leaders most likely to do so.

Of five possible on-site media, brochures were most liked followed by signs, rangers, bulletin boards and radio.

Section 6

LEADERS AND FOLLOWERS

Earlier sections indicate that effective Forest Service communication with San Gabriel Canyon users will be designed around off-site interpersonal communication networks linking members of recreation groups with their families, friends, and co-workers. The principal point of contact can be made on-site during their visit. In designing communication strategies, it is vital to know whom to contact in the recreation group. One logical choice is to identify and talk with the group leader. The question arises: "Are such people different from others in ways that might influence communication effectiveness?"

A random sample of leader-follower pairs was taken from among San Gabriel Canyon users. A number of sampling areas were picked with days and times assigned at random. Enumerators asked one randomly selected group member if he or she was the leader. If the person was the leader, another group member was randomly selected and both were interviewed. If the initial person was not, he or she indicated the group leader and that pair was interviewed.

Influence

Each person was asked independently, "Who do you consider the group leader to be?" Everyone designated as "followers" said that someone else was the leader. Of those identified as "leaders," seven of 34 believed someone else was.

Most answered that they "shared responsibility" for their group's decision to come to the Canyon as opposed to having taken sole responsibility, made a suggestion, or had no involvement in the decision. Leaders and followers generally reported the same level of involvement in the decision. This suggests that the decision can be influenced by knowledge brought to the group by any of the members.

In 71% of the cases, if it was the leader's first visit, it was also the follower's first visit. For 12.9% of the pairs, it was the leader's first trip to the Canyon but not the follower's. In 16.1%, the leader had been there before but the follower had not. Leaders were no more likely to have visited the Canyon before than were followers.

Typically, both leaders and followers said they would spend four days or fewer enjoying the Canyon during the year of the study. Both the mode and median were in that category. In 73% of the pairs, both expected to make the same amount of use. Leaders planned to make more use of the Canyon in 11.7%; followers intended more use in 11.5% of the pairs. Leaders did not visit the Canyon more often than followers.

In 56.2% of the pairs, the leader had visited before the follower while for 25% both had discovered the Canyon the same year. Leaders have longer histories of use than followers ($p < .015$).

How Respondents First Learned of San Gabriel Canyon

"Do you recall how you first found out about San Gabriel Canyon? How did that happen?" Both leaders (81.8%) and followers (85.3%) first learned of the Canyon through interpersonal channels. Leaders and followers did not differ in how they first learned of San Gabriel Canyon.

Interpersonal Communication

Over half the leaders (61.8%), but less than half the followers (42.4%) had told someone about their last outing. Within the pairs, 66.7% either both talked or neither did. In 27.3% of the pairs, the leader did while the follower didn't while in 6.1% the follower did but the leader didn't. Leaders may be more likely than followers to tell others about their last forest recreation outing ($p = .06$).

Leaders were more likely to talk to friends ($p < .04$) but both leaders and followers talked to family and co-workers in about the same proportion. In 63.6% of the cases, both either did or did not tell friends but in almost a third (30.3%) leaders told friends while followers did not.

The most common place for such conversations was in the home. More than a third (35.3%) of the leaders and about one quarter (24.2%) of the followers did so. Work was the second most common area for discussion with 17.6% of the leaders and 15.2% of the followers having discussions there. Both members of the pairs were as apt to report conversations at home, work, or elsewhere.

Leaders were neither more nor less likely than followers to have heard about someone else's recent outing. Leaders and followers indicated identical responses in 66.7% of the times. For 12.1% leaders were told and followers were not; in 21.2% followers were told while leaders were not. The differences are not statistically significant.

Leaders may be less likely to hear news of outings somewhere besides work or home ($p < .06$) but otherwise there were no differences in where or from whom leaders and followers hear about other people's outings.

Exposure to Mass Media

There were no statistically significant differences between leaders and followers in their use of the mass media. Within pairs, they agreed on the extent to which they watched television, listened to the radio, read newspapers, and subscribed to magazines, the parts of newspapers read, and their favorite music. They had the same preferences for media as channels for information about the Canyon. They preferred the same on-site media.

Summary

Very few differences were observed between leaders' and followers' communication behaviors. Leaders were more likely to talk about recent outings and may be more inclined to tell friends. They also visited the

Canyon earlier than followers. Followers may be more likely than leaders to hear about an outing somewhere besides at home or work. Other differences were not statistically significant.

Section 7

SUMMARY AND RECOMMENDATIONS

Summary of Findings

1. Almost three quarters of those surveyed first heard about San Gabriel Canyon from another person. Except for guidebooks, mass media were unimportant sources of information.

2. Although all ethnic groups were more likely to learn about the Canyon from interpersonal channels, "Americans" were more likely than others to use guidebooks ($p < .03$).

3. Large numbers of those surveyed were new visitors (26.9%). More than a third (35.2%) had made their first Canyon trip during the survey year.

4. Ethnic groups differ in the length of time they have used the Canyon ($p < .023$). Europeans report the earliest original use followed by Latins, Whites, "Americans" Asians, and Blacks.

5. Over 60% of the respondents had told others about their last forest outing. Friends were told most often (65%), family (22%), and co-workers (13%). Typically people discussed outings at home (27%) or at work (20%).

6. Ethnic identity may influence such conversations. Latins may be more apt than "Americans" to tell others about their recreation ($p < .08$).

7. Older people were more likely than younger to mention the outing to co-workers ($p < .01$) but both were as apt to tell friends and family.

8. Those who talked about recent San Gabriel Canyon usage had been visiting the area for a longer time than those who did not tell someone about the experience ($p < .001$).

9. Those who talked to co-workers had the shortest histories of Canyon use; those who related their experience to friends had visited for an intermediate number of years; and those who talked to family had used the Canyon the longest ($p < .019$).

10. Visitors who had discussed their outing were exposed to more types of mass media than were those who had not ($p < .003$).

11. Newspapers may be read more by those who talked about outings than by those who did not ($p < .09$).

12. Those who talked about their last forest recreation were more likely to subscribe to a magazine than were those who did not ($p < .008$).

13. More than a third of the sample remembered recently being told of someone else's outing.

14. Women may be more apt than men to have been told about a recreation experience ($p < .059$).

15. Among "Americans" -- but not among other ethnic identities -- women had less influence than men on the choice of recreation sites ($p < .03$).

16. First time visitors have recently been told of someone's recreation outing more often than repeated Canyon users ($p < .02$).

17. Those who have been told recently about a forest outing reported less influence on the site decision than did those who had not been told ($p < .03$).

18. Television was watched "since Monday" by 82.6% of the respondents; 87.1% listened to the radio.

19. Latins, Europeans, and "Americans" may listen to the radio "all day" more than do Whites, Blacks, or Asians ($p < .09$).

20. Among people classifying themselves as White -- but not among other ethnic identities -- those who had watched television influenced their group's choice of the Canyon less than those who had not watched television ($p < .001$).

21. More than three quarters (76.8%) of those asked had read a newspaper "since Monday," with the sports section most popular -- especially among men -- followed by the front page.

22. Whites and Europeans may be more apt to read the front page than Latins, Asians, and "Americans" ($p < .09$).

23. Editorials were read more by older people than by younger ones ($p < .03$).

24. More than half the respondents (54.1%) subscribed to a magazine.

25. Latins may be less likely than others to subscribe to a magazine ($p < .06$).

26. As an information medium about Canyon recreation, 34.8% prefer newspapers; 28.5% radio; 26.8% television; and 9.6% magazines.

27. Those who preferred newspapers reported the most influence on their group's choice of the Canyon with those who preferred magazines ranked next and then radio listeners and finally television viewers ($p < .003$).

28. Brochures were most desired for on-site information, followed by signs, rangers, bulletin boards, and radio.

29. Most respondents preferred rock music (43.4%) then classical (12.1%), jazz (12.1%), easy listening (10.8%); country, pop,rythm and blues, and no preference accounted for the remainder.

30. Music preference was related to age ($p < .0001$). Classical listeners were oldest; rock listeners were youngest.

31. In leader-follower pairs, leaders had visited the Canyon first ($p < .015$).

32. In such pairs, leaders may be more likely to discuss their last outing ($p < .06$).

33. In these pairs, leaders are more likely to tell friends but no more apt to tell family or co-workers ($p < .04$).

34. However, leaders may be less likely to hear about someone else's outing anywhere except at home or work ($p < .06$).

Recommendations

This research suggests the model of communication between the Forest Service and visitors illustrated in the cover figure. The model is a recommended strategy not a description of how communication now occurs.

In this scenerio, a Forest Service recreation technician (RT) is assigned to patrol a unit much as lifeguards do beaches, or fire prevention technicians have patrol units. The RT is equipped with a radio, first aid kit, and interpretation and public information materials, and has received training in emergency medical techniques, basic law enforcement, fire fighting, and, most vitally, the social psychology of leisure and recreation as well as intercultural and interpersonal communication. The RT wears a Forest Service uniform and conducts most of the patrol duties on foot.

The RT's goals are to improve recreation user safety, protect forest resources, prevent fires, vandalism, theft, and other losses, enhance the quality of the recreation experience by providing information, education, and interpretation services, and to be an active, two-way link between the Forest Service and the visitors.

In a typical patrol, the RT will informally contact users of the recreation area. Often, visitors initiate the conversation ("Is that snake poisonous?"). From time to time someone needs assistance with an injury (a child's foot cut on a broken bottle). Chances arise to provide interpretation or environmental education to several people who are fascinated about the Canyon's gold mining history or a fish in the creek.

Sometimes it is necessary to deal with dangerous or destructive behavior. A fire may be built unsafely. Visitors are cutting vegetation to make more room for their camp. Someone is drunk and disorderly. Often the opportunity arises to make friendly visits and leave information or gather useful marketing data through conversations and behavior observations. The RT may

organize short interpretive presentations at convenient places and visit a number of sites inviting the inhabitants to the demonstration.

During each contact, the RT has an opportunity to enter the informal communication networks linking group members and their families, friends, and co-workers, and can acquire feedback as well as provide facts. If the RT is properly trained in sampling and practiced in observation and data recording, much useful planning and marketing information can be got in this way. Such monitoring can identify problems before they result in difficulties for either the Forest Service or the Canyon users. Changes in use patterns, equipment, group types and resource impacts can be documented and passed on to planners or managers.

Because messages change as they pass along informal networks, the RT will distribute various brochures -- the preferred on-site medium -- when contacts are made. These will be simple, based on users' felt needs for information, and printed in the several common languages of Canyon visitors. The principal purpose of these brochures is to improve the reliability of messages passed from present users to potential users when they talk about their experiences off-site. They will be attractive, perhaps printed in the form of a newspaper, plentiful, and visitors will be encouraged to take them home and share them with friends.

Such easily changed brochures will be supplemented by an "official guidebook." Guidebooks were found to be the only form of mass media used by visitors as a source of initial knowledge about the Canyon.

The RT will encourage people contacted to tell their friends, family, and co-workers about the outdoor recreation resources of the Forest and Forest Service rules, regulations, and expectations. During the conversation, the RT will explain the reasons for the restrictions and suggest ways to reduce the inconvenience they cause. The RT will also listen to suggestions from the users of ways to make the restrictions more convenient while still achieving the management goals.

The Forest or District Public Affairs Officer (PAO) will initiate a series of columns to be published on the sports pages of the newspapers read by the visitors. Perhaps it will be possible to recruit writers from among the Forest users so that the columns become the users own medium instead of the Forest Service's. The RT will encourage visitors to read the columns when they are planning their forest visits.

The brochures, guidebooks, and newspapers will serve as the principal media contacts for present and potential Canyon users. These have advantages over radio and television in that they can be carried away, saved, passed on to others, and turned to at any hour.

On-site signs will provide directions, such as to permitted fire areas, plus serve as reminders of facts learned from RTs or friends and family. Signs will be positive in tone, provide wanted information, and be placed in

appropriate locations. Signs will not be used to teach, persuade, or explain complex matters because they simply don't work for these purposes.

Public affairs officers will continue placing relevant "front page" and "sports page" news stories in all the media, recognizing, however, that mass media play only a supporting role to the interpersonal networks.

A newly established channel within the agency will direct intellegence gathered by the RTs to planners and managers as an aid in making informed decisions. The flow of user-destined policy and management information will also be improved so that RTs are always up to date and clear about Forest Service messages thus allowing the agency to speak with "one, clear voice."

Summary

There is no single message and media combination to ensure direct, powerful, effective, communication to the forest visitor. Even in Southern California's media culture, individuals apparently rely heavily on interpersonal contacts for knowledge about outdoor recreation opportunities. The Forest Service should use an integrated program built around these informal networks.

The time to introduce messages into the informal networks is while visitors are on-site. The best method is face to face contact between a Forest Service recreation technician trained in interpersonal and intercultural communication and members of the recreation groups, especially the leaders. Only in this way can the Forest Service message be adapted to the needs of the many different ethnic and cultural groups represented among the users of near-urban national forests.

Mass media are efficient with homogenous audiences but increasingly ineffective as audiences diversify. However, they can support informal communication. Official guide books and brochures as well as newspaper stories on the sports and front pages reinforce and expand interpersonal messages. Use of the mass media can be increased if the RT promotes it during on-site contacts and public affairs officers ensure that there is a dependable flow of information in the mass media used by the forest visitors.

Signs are effective ways to remind visitors of things they have learned through other channels and to provide simple directions. They are ineffective means of persuasion and do not work well as channels for complex ideas. Signs should be used sparingly or they will quickly lose even their limited effectiveness.

Marketing is a two-way communication between forest visitors and the Forest Service, and the principal means of "staying close to the customer." Although more formal reseach methods should be used where appropriate, RT monitoring during that employee's daily visitor contact will provide much that is useful. Such knowledge, passed on and used within the Forest Service, can improve the quality and efficiency of resource planning and management.

Effective interaction with forest visitors requires adaptation to their natural communication profiles. Ideas, attitudes, and behaviors cannot be forced on anyone through communications except in rare circumstances, none of which apply to the wildland-urban recreation interface.

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APPENDIX

CALIFORNIA STATE POLYTECHNIC UNIVERSITY
19 38
POMONA

3801 West Temple Avenue
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Telephone (714) 869-2769

HPER/
Recreation Administration
College of Arts

October, 1988

Dear Forest Visitor

WE NEED YOUR ASSISTANCE AND YOUR VIEWS ARE IMPORTANT!

I would like to ask you some questions about recreation in San Gabriel Canyon. This interview is part of a study being conducted by faculty at California State Polytechnic University-Pomona and California State University-Chico.

We want to improve communication between people who use this area and the U.S. Forest Service that manage it. Most of the questions are about how you get information in general, what information you prefer once you are here and what your group is like.

Each question is important to the study and your response is highly valued. Your individual answer to a question will not be shared with anyone as all response are summarized and reported in statistical form. Please respond to all the question but is there are questions you don't want to answer, you don't have to... just indicate you don't want to answer that question.

Your time and attention to this interview is most appreciated. This sheet is provided so that you know the questions the interviewer will ask. You may keep this part of the form is you wish.

Sincerely yours,

Robert E. Pfister
Field Supervisor
Forest Users Communication Study

P.S. If you would like to receive a summary of our findings, please let the interviewer know or you can be placed on our mailing list by writing to the address on the inside page.

Forest Users Communication Study
c/o Dr. Robert E. Pfister
Recreation Administration 43-115
California State Polytechnic University-Pomona
3801 West Temple Avenue, Pomona, CA 91768

SAN GABRIEL CANYON RECREATION USE STUDY
FIELD GUIDELINES AND INSTRUCTIONS
(September/88)

This guide is organized into THREE parts:

I. KEY ELEMENTS of the procedures: YOU - THEM - THE TASK
KEY CONDITIONS of the process: OBJECTIVE - EMPATHY - BREVITY
The interview actually begins with by first asking several easy-to-answer general questions. The questions serve as "ice-breakers" and lets you make a very general asssessment of the social group.

II. PROCEDURES SPECIFIC TO PHASE II
The DIAD technique for the Fall data collection means: interview two members of each group--the leader and other member.

III. Key criteria: "BREVITY"
It means being prepared. You must complete a few things prior to approaching a group.

Part I: YOU - THEM - THE TASK

YOU — Why are YOU here? The visitor first needs an explanation about why you are conversing with them in the first place.

It's is best to (1) give them your name and (2) identify you are working for Cal. Poly.

THEM — EMPATHY. Look at the situation from their view. Each group should be treated as you were in their shoes.

It's important to respond to their situation. Help them, if appropriate, and note their reaction to your introduction (apparent leader, language, etc.).

THE TASK — BREVITY is mutually beneficial. The key task is for you to obtain pertinent information and achieve the objective as quickly as the situation permits.

They know about YOU and you know about THEM so the challenge is to accomplish your TASK -- get the interview completed before other external factors make the situation for difficult.

HERE'S SOME SUGGESTIONS [Doing it "BY THE NUMBERS"]:

1. Greetings and Introduce yourself then ask two opening questions:

How long did it take you to drive here today? _____ minutes

How many are there in your group? _____ number of individuals

[NOTE: The response to these two questions would be recorded on your log and the Questionnaire.

This initial effort is a vital step. It can result in two important outcomes: (i) they begin to feel comfortable with you;
(ii) they understand the interview will not take much of their time and their participation is highly valued.

2. Ask them to respond to each question. Assist as appropriated.

3. Collect the questionnaires. Thank them for their contribution. Then leave their area to complete your tasks. Enter "group number of response form.

Part II: THE DIAD INTERVIEW

On days when you are instructed to conduct diad interviews, you will do so for groups of three or more individuals only. They will have to be together or in close proximity as you will need to identify the group leader. The procedures are:

1. Make contact with an individual as before and ask them who is the group leader.

2. IF THEY SAY THEY ARE THE LEADER, interview them and one other member of the group at random. I suggest selecting the individual who most recently celebrated their birthday. You could use other spatial criteria if this does not work.

3. IF THEY SAY THEY ARE NOT THE LEADER, then identify the leader which is, if you are asked, the most experience individual in the group. It may be they are the designated spokesperson based upon prior visits to the area, language ability, and hopefully the role as a leader in group decision-making.

Part III:

BREVITY means being prepared prior to contacting the group. This is accomplished by:

1. Checking out supplies and the materials you will need for the next interview. Note your appearance. It's is important to appear as if you are "official" and sincere.

2. Complete log sheet before beginning each interview Assign a "Group Number" for each set of interviews.

Location____ Group # _____

1. How many people are there in YOUR GROUP? ADULTS_____ CHILDREN _____ (less than 16)

2. Who do you consider the group leader? [ ]Me or [ ]another _____ (Ask Q. 2.A.)
Gender of the leader: :
[ ]Male [ ]Female

A. What is your relation to that person eg.- spouse, friend, parent, etc.? _____

3. Is this your first visit to SGC? [ ] YES [ ] NO (Ask A)
A. When was the first time? _____YEAR

B. How many days will you spend in the canyon in 1988-- would you say:
[ ] more than 20 days?
[ ] between 10 and 20 days?
[ ] 5 to 9 days?
[ ] 4 days or less?

4. Do you recall how you first found out about San Gabriel Canyon? How did that happened?

A SITE ENCOUNTER	B INTERPERSONAL	C MASS MEDIA
[ ] driving around for recreation	[ ] told by friend rec:_____	[ ] guidebook
[ ] other non-recreation driving	[ ] told by family rec:_____	[ ] map
[ ] visited as guest of others	[ ] told by official	[ ] brochure
_____	[ ] told by stranger	[ ] newspaper
_____	_____	[ ] radio
		[ ] TV
		[ ] magazine
		_____

PROBES: A: "Can you tell me more about what you were doing?
B: "How that person was related to you?"
C: "Can you describe that a little more?"

MASS MEDIA COMMUNICATION -- The next FIVE questions are about your use of radio, television, newspapers, and other mass media.

5. SINCE LAST MONDAY,
-- have you watched any TELEVISION? [ ] NO [ ] YES, Ask A
A. What times of the day? From_____ To_____

B. Do you have any favorite programs you like to watch? _____

6. -- have you listened to RADIO? [ ] NO [ ] YES, Ask A
A. What times of the day From_____ To_____
B. Your favorite radio station? _____ [ ] none
C. What kind of music do you enjoy most? _____

7. -- have you read a NEWSPAPER? [ ] NO [ ] YES, Ask A
A. What newspapers did you read? [ ] Times [ ] Tribune
[ ] Register [ ]_____

B. Which parts of the newspaper do you read most often? [LIST] _____

8. Do you subscribe to any MAGAZINES? [ ] NO [ ] YES, Ask A
A. Which ones? (name up to three) · _____

9. Consider the four communication optons.>> Enter number [1st, 2nd..]
WHERE would YOU MOST like td find messages [ ] TELEVISION
about recreation in SGC? [ ] RADIO
[ ] NEWSPAPERS
[ ] MAGAZINES

PERSONAL CONVERSATIONS-- We have two questions about your communication with friends, acquaintances, and others. The purpose is to find out how important other people are as sources of information.

10. After your last forest recreation outing, did you talk to anybody about what you did or where you went? [ ] NO [ ] YES, Ask A
    a. Who did you talk to? PROBE: "What relationship is that person to you?"] _____
    b. Where were you when you talked with that person? _____
    c. What kinds of things did you tell them about the outing? PROBE:"Anything else?"] _____

11. Has anyone told you recently about a recreation outing they went on? [ ] NO [ ] YES, Ask A
    a. Who was that person? (eg-What was relationship to you? _____ (brother,co-worker,friend)
    b. Where were you when you talked with this person? _____ (work,home,car,etc.)

SAN GABRIEL CANYON INFORMATION --Once you are here, how would you prefer to get information about things to do, special safety messages and so on? I will ask whether you like or dislike five different ways to get messages to you and you can indicate whether you like or dislike the idea.

ASK: "Do you like/dislike getting information from...
IF LIKE:"Would you say you like it very much or just like it?"

12.

	DISLIKE	LIKE	LIKE VERY MUCH
-brochure given at the entrance	[ ]	[ ]	[ ]
-ranger who stops by for visit	[ ]	[ ]	[ ]
-a radio broadcast	[ ]	[ ]	[ ]
-notes on bulletin boards	[ ]	[ ]	[ ]
-signs along the road	[ ]	[ ]	[ ]

13. How would you describe your role in the decision to come here today?
    [ ] Solely responsible
    [ ] Shared responsibility
    [ ] Made a suggestion
    [ ] No involvement

14. What activities will you be doing while in SGC today? _____ _____ _____

15. What are the names of the TWO MAJOR STREETS intersecting near your home? AND...What is you ZIP code?
    Street: _____
    Street: _____
    ZIP: _____

16. What ethnic or cultural group DO YOU PREFER that people think of you as? (Hispanic, Black, Vietnamese, Irish, etc.) _____

17. As to your age, in what category would you place yourself?
    [ ] 12 - 24 [ ] 25 - 39
    [ ] 40 - 59 [ ] 60 +

18. What languages do members of your group speak?
    [ ] _____ [ ] _____ [ ] _____

[conclude] THANK YOU. YOUR ASSISTANCE IS GREATLY APPRECIATED